

**CLAIMS:**

1. A method comprising:  
 receiving product movement information including a source location, a destination  
 location and a transportation device; and  
 generating a report indicating commingled products based on the product movement  
 information.
2. The method of claim 1, wherein generating a report comprises determining a plurality  
 of lots based on the product movement information.
3. The method of claim 2, wherein determining a plurality of lots comprises assigning a  
 new lot identifier when the products are commingled at a location.
4. The method of claim 1, wherein the product movement information includes a  
 designation of a farm, a field and time harvested.
5. The method of claim 1 further comprising issuing a recall order recalling a lot  
 determined to be contaminated.
6. The method of claim 5 further comprising:  
 determining all lots that have been commingled with the contaminated lot; and  
 recalling all the lots determined to have been commingled with the contaminated lot.
7. The method of claim 1 further comprising:  
 presenting a contract interface to define contracts between producers and customers  
 based on order established by the customers; and  
 providing a contract module to monitor contract generation and prevent a contract  
 from being generated that is in excess of the order.

8. The method of claim 1, further comprising presenting an interface to define programs for tracking a given lot.
9. The method of claim 8, further comprising presenting an interface for receiving program information to establish checklists for procedures for moving and storing the given lot.
10. The method of claim 8, further comprising:  
presenting an interface for receiving program information for establishing parameters for certifying actions taken in moving and storing the given lot; and receiving an indication that the actions have been certified.
11. The method of claim 1, wherein the identification of the lot further comprises an indication of the character of the product.
12. The method of claim 11, wherein the product is a grown commodity and the indication of the character of the product includes the seed variety used to grow the commodity.
13. The method of claim 11, wherein the product is a grown commodity and the indication of the character of the product includes an indication of whether the commodity is bio-engineered.
14. The method of claim 11, wherein the product is a grown commodity and the indication of the character of the product includes an indication of whether the commodity is conventionally grown.
15. The method of claim 11, wherein the product is a grown commodity and the indication of the character of the product includes an indication of whether the commodity is organically grown.

16. A method comprising:  
receiving product movement information including a location identification; and  
storing the product movement information, wherein the product movement  
information includes an indication of a time in, a time out, a location  
identification, and an indication of whether the location was clean and empty  
when receiving the lot.
17. The method of claim 16 further comprising receiving a lot identifier.
18. The method of claim 17 wherein a new lot identifier is assigned to each new lot and a  
new lot is created each time two lots are commingled.
19. The method of claim 16, wherein the location information indicates a transportation  
device.
20. The method of claim 16 further comprising tracing the lot to determine the location  
that the lot has been in and to determine every product that has been commingled  
with the lot.
21. The method of claim 20 further comprising generating a report of the traced lot.
22. The method of claim 16 further comprising issuing an order recalling a lot determined  
to be contaminated.
23. The method of claim 22 further comprising:  
determining all lots that have been commingled with the contaminated lot; and  
recalling all the lots determined to have been commingled with the contaminated lot.
24. The method of claim 16 further comprising providing an interface for allowing the  
customer to define programs for tracking a given lot.

25. The method of claim 16 wherein the product movement information is received from a business entity.
- 5 26. The method of claim 24 further comprising providing an interface for establishing checklists of procedures for moving and storing the given lot that must be followed to comply with the program.
- 10 27. The method of claim 24 further comprising:  
providing an interface for establishing parameters for certifying actions taken in  
moving and storing the given lot; and  
receiving an indication that the actions have been certified.
- 15 28. The method of claim 27, wherein receiving the indication includes electronically receiving a certification document.
- 20 29. The method of claim 16, wherein the identification of the lot further comprises an indication of the character of the product.
- 30 30. The method of claim 29 wherein the product is a grown commodity and the indication of the character of the product includes the seed variety that was used to grow the commodity.
- 25 31. The method of claim 29 wherein the product is a grown commodity and the indication of the character of the product includes an indication of whether the commodity is bio-engineered.
32. The method of claim 29, wherein the product is a grown commodity and the indication of the character of the product includes an indication of whether the commodity is conventionally grown.

33. The method of claim 29, wherein the product is a grown commodity and the indication of the character of the product includes an indication of whether the commodity is organically grown.

5 34. A method comprising:  
 receiving lot identification information from a producer;  
 receiving storage location information for each storage location the lot is stored in  
 including an identification the storage location, an indication of a time in, a  
 time out, and a clean and empty status;  
 10 receiving transportation information about each transportation device the lot is  
 transported in, including an identification the transportation device, an  
 indication of a time in, a time out, and a clean and empty status;  
 storing the received information in a database; and  
 displaying a tracking interface for tracking a lot based on the information in the  
 15 database.

35. The method of claim 34 wherein new lot identification information is assigned to each new lot and a new lot is created each time two lots are commingled.

20 36. The method of claim 34, wherein the received storage location information also includes an identification of any other products that the lot may be commingled with during storage.

25 37. The method of claim 34, wherein the received transportation information also includes an identification of any other products that the lot may be commingled with during storage.

38. The method of claim 34, wherein lot identification information is a designation of a farm, a field and a time harvested.

39. The method of claim 34 further comprising tracing the lot to determine each storage location and transportation device that the lot has been in previously.
40. The method of claim 39, wherein tracing the lot identifies every product that has been commingled with the lot.
41. The method of claim 34 further comprising:  
determining if a lot is contaminated; and  
issuing an order recalling a contaminated lot.
42. The method of claim 41 further comprising:  
identifying each lot the contaminated lot has been commingled with; and  
recalling all lots commingled with the contaminated lot.
43. The method of claim 34 further comprising providing an interface for a customer to define programs for tracking a given lot.
44. The method of claim 43 further comprising providing an interface for establishing checklists for procedures for moving and storing the given lot that must be followed to comply with the program.
45. The method of claim 44 further comprising:  
providing an interface for establishing parameters for certifying actions taken in  
moving and storing the given lot; and  
receiving an indication that the actions have been certified.
46. The method of claim 45, wherein receiving the indication includes electronically receiving a certification document.
47. The method of claim 34, wherein the identification of the lot further comprises an indication of the character of the product.

48. The method of claim 47, wherein the product is a grown commodity and the indication of the character of the product includes the seed variety that was used to grow the commodity.

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49. The method of claim 47, wherein the product is a grown commodity and the indication of the character of the product includes an indication of whether the commodity is bio-engineered.

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50. The method of claim 47, wherein the product is a grown commodity and the indication of the character of the product includes an indication of whether the commodity is conventionally grown.

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51. The method of claim 47, wherein the product is a grown commodity and the indication of the character of the product includes an indication of whether the commodity is organically grown.

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52. A computer-readable medium comprising instructions stored thereon causing a programmable processor to:

present an operating interface to receive operating instructions from a customer to define a lot tracking program;

present a production interface to receive lot identification information from a producer of the product;

present a transportation interface to receive movement information from a transporter of the product including an identification of the transportation device and timing information; and

present a storage interface to receive storage information from a storage facility indicating the location where the lot is stored and timing information.

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30 53. The computer-readable medium of claim 52, having further instructions stored thereon to cause the programmable processor to present a tracing interface wherein a

given lot can be identified and its history traced thereby identifying any other lots that have been commingled with the given lot.

54. The computer-readable medium of claim 52, wherein the timing information includes a time the lot moves in and a time the lot moves out.

55. The computer readable medium of claim 52, wherein the storage information includes an indication of whether the storage facility is clean and empty.

56. The computer readable medium of claim 52, wherein the movement information includes an indication of whether the transportation device is clean and empty.

57. The computer-readable medium of claim 52, having further instructions stored thereon to cause the programmable processor to provide a recall interface wherein a given lot can be identified as contaminated and the contaminated lot and any lots commingled with the contaminated lot can be identified and recalled.

58. The computer readable medium of claim 52, wherein the storage information includes an identification of any lots stored in the storage facility since the last indicated clean and empty status.

59. The computer readable medium of claim 52, wherein the movement information includes an identification of any lots moved in the transportation device since the last indicated clean and empty status.

60. The computer-readable medium of claim 55, having further instructions stored thereon to cause the programmable processor to:  
provide a contract interface so that a customer can define a contract as part of the lot tracking program; and  
monitor a contract status a prevent the generation of a contract in excess of the lot tracking program.



61. A computer-readable medium comprising instructions stored thereon to cause a programmable processor to create a database table comprising:
- a first field for storing a unique lot identifier;
  - a second field for storing a time stamp;
  - a third field for storing a unique location identifier; and
- update the database with information received relating to the database fields.
62. The computer-readable medium of claim 61, wherein a new lot identifier is assigned to each new lot and a new lot is created each time two lots are commingled.
63. The computer-readable medium of claim 61, wherein the time stamp includes a first time and date the lot is moved into a location and a second time and date that the lot is moved out of the location.
64. The computer-readable medium of claim 61 comprising further instructions stored thereon to cause the programmable processor to create a fourth field in the database for indicating whether other products are commingled with the lot.
65. The computer-readable medium of claim 61 comprising further instructions stored thereon to cause the programmable processor to create a fourth field in the database for indicating whether the location is clean and empty.
66. The computer-readable medium of claim 61 comprising further instructions stored thereon to cause the programmable processor to trace an identified lot and determine each location the identified lot has been in previously.
67. The computer-readable medium of claim 66, wherein the trace also indicates any other lots commingled with the identified lot.

68. A system comprising:  
 a database to store movement tracking information relating to a unique identification  
 of a lot, a location of the lot, and timing information; and  
 a web server to generate a tracking screen for tracing the movement and storage of  
 the lot based on the database and to identify any commingled products.
69. The system of claim 68, wherein the web server further comprises a program  
 configuration module configured to allow a customer to define a program for  
 tracking the lot.
70. The system of claim 69, wherein the program provides a checklist for handling the  
 lot.
71. The system of claim 69, further comprising a contract module that allows the  
 customer to generate a contract with a producer for a quantity of a product defining  
 the lot.
72. The system of claim 71, wherein the contract module prevents the generation of a  
 contract in excess of a predetermined maximum order.
73. The system of claim 69, wherein the program configuration module allows the  
 customer to define certification requirements for handling the lot.
74. The system of claim 70, wherein the certification requirements include electronically  
 delivering certification documents to the system.
75. The system of claim 68, further comprising:  
 an audit, certification and testing module configured to allow transporters of the lot to  
 identify a specific transportation device, a time the lot enters the transportation  
 device, a time the lot leaves the transportation device, and a clean and empty  
 status of the transportation device.

76. The system of claim 68, wherein the system is in communication with a business entity and receives movement tracking information from the business entity.

77. The system of claim 68, further comprising a contract module for facilitating and monitoring contracts wherein the contract module prevents the generation of a contract in excess of a predetermined order maximum.

78. The system of claim 68, further comprising an audit, certification and testing module configured to allow storage facilities that store the lot to identify a specific storage location, a time the lot enters the storage location, a time the lot leaves the storage location, and a clean and empty status of the storage location.

79. A system configured to track of movements of a product lot between a producer of the product, transporters of the product, and storage units that store the product, the system comprising:

a database;

a server configured to

receive production information from the producer, the production information including an identification of a seed variety used for the lot, the field the lot was grown on, a farm storage location, timing data indicating when the lot was stored and when the lot was shipped from the farm storage location, an identification of commingled products, and a certification certifying at least a portion of the production information;

receive transportation information from a transporter of the lot, the transportation information including an identification of the transportation device, a time received in the transportation device, a time unloaded from the transportation device, an identification of products commingled during transportation,

and a certification certifying at least a portion of the  
transportation information;

receive storage information including an identification of the storage  
facility, a time received by the storage facility, a time delivered  
from the storage facility, an identification of products  
commingled during storage, and a certification certifying at  
least a portion of the storage information;

store the received production information, transportation information,  
and storage information in the database; and

generate tracing information for the lot.

80. A system configured to track of movements of a grown product lot between a producer of the product, transporters of the product, and storage units that store the product, the system comprising:
- a database; and
  - a server configured to
    - receive production information from the producer, the production information including an identification of a seed variety used for the lot, the field the lot was grown on, a farm storage location, timing data indicating when the lot was stored and when the lot was shipped from the farm storage location, an indication when the farm storage location is clean and empty, and a certification certifying at least a portion of the production information;
    - receive transportation information from a transporter of the lot, the transportation information including an identification of the transportation device, a time received in the transportation device, a time unloaded from the transportation device, an indication when the transportation device is clean and empty, and a certification certifying at least a portion of the transportation information;
    - receive storage information including an identification of the storage facility, a time received by the storage facility, a time delivered from the storage facility, an indication when the storage facility is clean and empty, and a certification certifying at least a portion of the storage information;
    - store the received production information, transportation information, and storage information in the database; and
    - generate tracing information for the lot.

81. A method comprising:  
 receiving product movement information including a location status and a time  
 stamp;  
 storing the product movement information in a database; and  
 5 generating a report identifying each product location and any other products  
 commingled with the product.
82. The method of claim 81, wherein the product movement information includes a  
 unique product identifier that includes a designation of a farm, a field and time  
 10 harvested.
83. The method of claim 81, further comprising recalling a lot determined to be  
 contaminated.
84. A system comprising:  
 15 a database to store product movement information including a location, a location  
 status, and a time; and  
 a lot tracking module to generate a tracking information for the product based on the  
 product movement information stored in the database.
85. The system of claim 84 further comprising an audit, certification and testing module  
 20 configured to receive the product movement information.
86. The system of claim 84, wherein the lot tracking module identifies commingled  
 25 products based on the product movement information.
87. The system of claim 84, further comprising a program configuration module that  
 receives and presents customer programs.